

INTRODUCTION

Gentlemen:

Before I begin I would like to give credit where credit is due. The facts that I will present here tonight are not derived from my own personal research but are based on a tremendous amount of very careful analysis undertaken in ORR/CIA. In view of my own limited knowledge of many of the very detailed calculations, I frankly would like to stay away from the details and to stick to some of the more major developments within the past few years. I intend to confine this review to the areas of industry, agriculture, and trade.

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INDUSTRY

The trend of economic growth within the Soviet Union obviously is important both with respect to political stability and "cold war" power on the one hand and economic potential for war on the other. Recognizing that the economic situation is merely one element in all of this -- albeit an important one -- let's take a look at recent trends in the Soviet economy and the anticipated future developments.

An important measure of these trends is the Soviet gross national product or the total value of all goods and services produced. From 1948 to 1954 Soviet gross national product jumped from 79 billion dollars to 124 billion dollars or almost a 60 percent increase. In this same period its relationship to the U.S. economy changed from about 30% to 35% although the actual difference between the output of the two economies widened in favor of the U.S. Between 1954 and 1960, it is

estimated that this trend will continue, namely that percentage-wise the Soviet position will increase but that the difference in gross national products will continue to widen so that by 1960, U.S. gross national products will be about 260 billion dollars greater than the Soviet as opposed to 220 billion in 1954.

(Note: U.S. and NATO estimates very favorably calculated.)

This is an extremely important point -- because the Soviet tendency to emphasize the percentage relationship has obscured -- even in this country -- the widening gap in actual economic output. The disparity between the total Bloc and the West is moving in roughly the same way. One might ask why it is that the Soviets with relatively complete control over their economy simply don't allocate sufficient effort to industrial development to enable them to catch up. This is more easily said than done. As it is now the Soviet consumer goods are only 1/11 that in the U.S. and agricultural output is only around 60 percent of U.S. farm product. Yet the Soviets have to support a population 30

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percent larger than the U.S. Therefore additional effort cannot be drained from the consumer sector of the economy without impairing productivity and industrial production. Nor is it likely that the Soviets will draw down defense expenditures to assist their economic growth. They have repeatedly shown their awareness of the increasing military might of the West and they simply would not risk any significant cut-backs for the sake of economic growth.

Nevertheless we should not under-estimate the impressive expansion of Soviet industry. While the entire economy has grown about 50 to 60 percent since 1948, the industrial sector alone has jumped 100 percent or double the 1948 level. And by 1960 is expected to increase another 50 percent. Output of energy, metals, chemicals, and metalworking machinery, for example, by 1960 will all be well over three times the 1948 level.

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All this means that in terms of the "cold war" period, there is little likelihood that either internal economic difficulties or external Western measures - such as the economic defense program can prevent significant advances in the Soviet economy. And parenthetically I'd like to say that this is not an argument against the economic defense program as some people have construed it to be. This program is a useful impediment to Soviet growth. Rather it is to point out the limitations of such measures and to argue that we should be realistic in our expectations of its effect. However, there are two situations which will be of concern to the Soviets in the "cold war" period. One is the widening gap between Soviet Bloc and Western economic output -- barring major depressions in the West -- and the other is the serious Soviet agricultural situation. I'll have more to say about this agricultural situation a little later on. So much for the "cold war"

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aspects.

Now as to the significance of the Soviet economic situation for a possible "hot war", we might first look at that sector of the economy devoted to defense support.

Immediately after World War II, and prior to 1949, the sharp drop in U.S. armament expenditures enabled the Soviets to surpass this country in the delivery of military end-items to the armed forces. However -- despite the continued high percentage of Soviet effort assigned to defense -- to the detriment of the consumer and over-all economic development -- they have not been able to match the impressive increases in U.S. armament deliveries since 1951. Today U.S. output of military end-items is probably more than double that of the USSR and this does not include nuclear energy expenditures.

Converting these general statements to military hardware terms, the Soviets have been able to build up a small surface

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fleet of more than 200 ships -- over 90 percent destroyers;
a sub-surface fleet of about 350 submarines; 20,000 aircraft;
and almost 80,000 tanks and assault guns.

In fact it has been estimated that existing inventories
of equipment are sufficient to mobilize from the present
level of approximately 175 divisions to 500.

Recognizing again that economic factors are but one
element in wartime, it seems fairly clear that in a war not
involving weapons of mass destruction the Soviet economy
could support a war of from 12 to 18 months. While some
stringencies would probably appear in items such as copper
and petroleum these shortages would certainly be manageable.

Lest some of you have been misled with general statements
about critical Soviet shortages or generalizations about the
significance of Western economic superiority, let me review
with you for a moment our sad experience in estimating

German economic strength before the last war.

Before World War II the Allied Powers were aware of a long list of deficiencies which existed in the German economy. This list included some of the following vital materials:

Petroleum and Iron Ore	2/3 of pre-war consumption imported
Manganese	No deposit of any consequence
Ferro-alloys (Tungsten, nickel, cobalt)	Deposits almost totally lacking
Copper	Less than 10 percent of requirements produced domestically
Bauxite (For aluminum)	No deposits
Rubber	No production of natural

And we could extend this list to include lead, tin, zinc, mica, sulphur, and many, many others.

These facts unfortunately led many people astray, including specialists in economic warfare. Statisticians could prove

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that Germany was hopelessly lacking in almost all of the raw materials necessary to carry on a real war. Moreover, many experts concluded that if Germany started another war, a blockade exploiting these deficiencies would bring about military collapse or revolution in a very short time. As a result many felt that Hitler was merely bluffing and the illusion of a "phony" war lasted, as you know, until the spring of 1940.

But what actually happened? Let's list some of the actions Germany took to offset the effects of economic warfare:

1. The government took firm control of the country's economy thereby permitting an allocation of scarce materials to priority military objectives.
2. Tremendous preparations were made to stockpile scarce materials.

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3. Low grade mineral deposits, which normally would be unprofitable to work, were mined intensively.

4. Agricultural lands were cultivated more intensively and poor lands were put into cultivation for the first time.

5. Synthetics were developed and substitute products were used to replace certain essential imports, including certain alloy metals and rubber.

6. Plans were made to obtain supplies of vital materials from neighboring countries by conquest or purchase, including petroleum from Rumania, iron ore from France, nickel from Finland, and so forth.

The Allied nations were, of course, aware that some of these things were going on but the ability of Germany to make adjustments overcoming the critical deficiencies of her economy were grossly underestimated.

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All of this is not to argue that the Soviets have unlimited capabilities to overcome all of their weaknesses. I simply want to point out that Germany with many more economic deficiencies than the USSR and from an economic potential much smaller than the Soviets derived a pretty powerful military force.

Everything we have said up to this point about Soviet economic capabilities has related to a short war without the employment of weapons of mass destruction. I frankly do not want to waste your time with predictions of capabilities in either a long war or a war involving nuclear weapons. I personally feel that the "unknowns" in this kind of equation are too important to make such an estimate meaningful.

1. Will the Soviets over-run Western Europe and utilize its economic resources?
2. What would be the extent of nuclear weapons destruction?

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3. To what extent could the Soviets recuperate from such destruction?

4. To what extent would Western forces have the capability to re-attack with nuclear weapons over a period of time?

And so on. While these answers may be available somewhere, I certainly don't have them for you tonight. One thing, however, seems fairly certain, -- the Soviets won't be a push-over under any conditions.

4 Slides

- (1) Growth - U.S. and Soviet
 - (2) GNP - Bloc and West
 - (3) Growth - Soviet Industry
 - (4) Armament Production - U.S. and Soviet
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AGRICULTURE

The seriousness of the Soviet agricultural problem has long been recognized by intelligence experts and within the last two years the Soviets themselves have given this situation increasing publicity. You may remember the repeated references to agricultural policy as a "bone of contention" at the time of Malenkov's political demise. The Soviet difficulties in this field are among the most serious in the entire economy and center on 2 inescapable facts:

1. Since 1938 the Soviet population has increased by 13 percent whereas agricultural output has increased only 6 percent. The net effort of this has been a 4 percent decline in the per capita availability of food.
2. While, in terms of calories, the availability of food is relatively adequate. It is over-balanced in starchy food and very weak in fats and proteins.

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The Soviets have clearly recognized that this situation threatens to retard economic growth by lowering urban labor productivities and creating population unrest.

Malenkov's answer to this problem was more intensive and effective utilization of existing acreage to get with increased incentives to the peasants. This meant greater investment in agriculture, increased fertilization, tax reduction and increases in the availability of consumer goods. Khrushchev, on the other hand, wanted something more dramatic. His choice was to shoot "craps" with the weather in a gamble for sharp increases in output. This gamble involved 2 new programs of considerable proportion:

1. The so-called "new lands program" expanding wheat acreage on more than 70 million acres of marginal

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lands in Kazakhstan and Western Siberia; and,

2. A 60 million acre expansion in corn crops by 1960 -- largely for hog feed. This, in turn, is to assist the expansion of live-stock numbers.

The principal objective of these tremendous plans is to double both grain and live-stock output by 1960. Now what are the prospects for success? Let's look first at the "new lands program." The areas marked by the Soviets for expansion of wheat acreage are less favorable than both the Ukraine and our Dakotas, and even in these areas crop yields from year to year are unpredictable because of uncertain rainfall. The experts calculate that the new lands will be subject to drought two years out of every 5 and this not only reduces the average annual yield but raises the real possibility of the kind of "dust bowls" that have plagued certain farming areas of the United States. It is

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true that in his first roll of the dice, Khrushchev was successful. Climatic conditions in 1954 were exceptionally favorable and the harvests were better than he might have hoped for. However, the dice are loaded against him over the next 5 years.

The corn acreage drive also is fraught with risks. The areas within the so-called fertile triangle marked for increased corn acreage do not have -- on the average -- a favorable relationship of soil, temperature, and rainfall and there is no hope whatsoever of developing corn yields comparable to the United States corn belt as Khrushchev has hoped. Moreover, the substitution of corn for other crops requires larger amounts of machinery and manpower than the crops it is replacing; thereby detracting from other parts of the total agricultural effort.

In summary, all of this adds up to some fairly bleak prospects for the attainment of Soviet objectives. U. S.

experts who follow this situation very closely have estimated that by 1960 Soviet grain and live-stock production output will -- at the very maximum -- increase no more than 20 to 30 percent over 1954. This is a far cry from the goal of a 100 percent increase and when compared with the anticipated growth in population, it is clear that in 1960 the Soviets at best will still have an agricultural problem and if weather conditions are worse than normal, this problem could be particularly serious.

2 Slides

(5) Food and Calorie Charts

(6) MAP - Fertile Triangle and "New Lands"

TRADE

I understand that last fall you were given the highlights of East-West trade developments by Dr. Galbreath -- and I don't intend to bore you with any repetition on this subject. However, I would like to put East-West trade in its proper relationship to intra-Bloc trade since this subject never seems to be given proper weight.

If we take the entire Bloc as a whole we find that total trade with the West -- that is, imports and exports combined, has run about 3 to 3.5 billion a year over the past 5 years. The Soviet share of this never ran over 1 billion a year until 1954 when it slightly exceeded that figure. On the other hand, Soviet trade with other Bloc countries has risen steadily over the past 5 years and now totals about 6 billion dollars a year, or roughly 6 times the trade with Western nations. In brief, 80 to 85 percent of the USSR's trade is

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with other Bloc nations. Communist China alone makes up only about 20 percent of this trade, but it should be emphasized that this Sino-Soviet trade has a significance greater than these figures imply. Since 1950 there has been a steady increase in Communist China's dependence on Soviet trade -- and today roughly 50-55 percent of Communist China's imports have been shipped from the Soviet Union and a high percentage of these shipments have contained items for Communist China's industrial development and military build-up.

One other fact should be pointed out here is that not only is trade with the West a small part of Soviet and Bloc trade, but, in addition, imports from the West are only a very small percentage of Soviet and Soviet Bloc production. Less than 3 percent.

What all this means is not -- as some people have construed it -- that since this trade is so small it need not be controlled at all by the West. I'm sure you must realize

the importance of withholding from the Soviets: arms, ammunition, implements of war; atomic energy items; items embodying our latest technological innovations; and the like. At the same time we must be realistic in our anticipations of just what effect such controls have. They are important irritants and impediments in the economy; but except for imposing delays they do not present the Soviets with problems that are not manageable over time. The Soviets, of course, would be better off if there were no Western controls, and would prefer it. The Chinese Communists likewise could get along without Western trade if they had to, particularly in view of their relatively heavy imports from the USSR. But they would prefer to continue the advantages of trade with the West and undoubtedly do not wish to be forced into the very troublesome adjustments that a cessation of trade would bring.

4 Slides

- (7) Trade - Bloc -- Free World
 - (8) Trade - USSR -- World
 - (9) Trade - USSR -- World
 - (10) GNP -- Bloc and West
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significant developments in Soviet industrial, agriculture and trade. In each of these areas the Soviets are constantly facing problems. And as each problem appears new hope seems to spring up in certain quarters in the West that the key to Soviet vulnerability has been found. But each year the Soviet economy continues to advance on all fronts and the Western optimists are repeatedly faced with disillusionment. I frankly see nothing on the Soviet economic scene that gives us any grounds for complacency. The other day I read an excerpt from General Twining's speech at Los Angeles last month which expressed my sentiments exactly.

"This year they showed us something new again. The Soviets turned out an aircraft powered with turboprops. From its appearance it could be a bomber, a refueling tanker, or a long-range reconnaissance plane. Its appearance is additional proof of the growing ability of the Soviet aircraft industry.

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The airplane that gives us real reason for concern here in the United States is the Soviet long-range jet heavy bomber. Last year they showed us one. This year, in the rehearsal for May Day, there were flights of more of these new long-range jets -- enough that we have to accept a rate of production.

These observations establish a new basis of our estimate of Soviet production of the heavy jet bomber and of the medium bomber. This knowledge is evidence of the modern technology of the Soviet aircraft industry and the advances which are being made by them. We must continue to be on the alert and maintain our own forces to insure the lead over the Soviets that we have.

We are producing jet bombers of our own -- the B-52. We have a lot of experience in building big bombers, but it looks as though the Soviets are improving in production.

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This isn't the first time the Soviets have upset the timetable. For example: We thought they could not duplicate our B-29 in less than six or seven years. They duplicated it in two years.

We thought they would have difficulty in making a good copy of the British jet engine. They produced a better one in less than a year.

Some experts thought they could not produce an atomic bomb in less than six to 10 years -- if at all. They rocked the world with a surprise explosion in about three years. This was about the same time it took the United States to produce the first atomic weapon.

They do have the ability to produce nuclear weapons and first-class aircraft to carry them."

There will always be a group of "the-Soviets-can't-do-it-school" within the Western world. And to my mind this is a much more dangerous ^{error} ~~exp~~ than over-estimating our potential

enemies -- but in conclusion I would like to say that the balance of over and under-estimating Soviet capabilities will always be a very delicate one, and while the presentation of balanced estimates is not very sensational, in the sense that we can continually excite the top level of government with our intelligence, it is essential that we maintain this balance if our policy-makers are to plan realistically.